

Fact Sheet



For Final Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-08900004-2012**
Application Received: **November 2, 2011**
Plant Identification Number: **08900004**
Permittee: **Columbia Gas Transmission, LLC**
Facility Name: **Flat Top Compressor Station**
Mailing Address: **1700 MacCorkle Avenue, S.E.**
Charleston, WV 25314

Issued: October 31, 2012

Physical Location:	Flat Top, Summers County, West Virginia
UTM Coordinates:	491.9 km Easting • 4159.9 km Northing • Zone 17
Directions:	From I-77, exit at WV secondary Route 48, turn left to US Route 19. Turn right on US 19 and travel approx. 2.5 miles to secondary Route 19/1. Turn left and proceed to station.

Facility Description

The Flat Top Station is a natural gas transmission facility covered by SIC 4922. The station has the potential to operate seven (7) days per week, twenty-four (24) hours per day. The station consists of one (1) 1.25 MMBtu/hr heating system boiler, one (1) 2.0 MMBtu/hr hot water boiler, one (1) 1.0 MMBtu/hr line heater, one (1) 544 hp reciprocating engine, one (1) 16 hp air compressor, and one (1) 6083 hp turbine engine.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2010 Actual Emissions
Carbon Monoxide (CO)	123.20	31.86
Nitrogen Oxides (NO _x)	78.99	23.07
Particulate Matter (PM ₁₀)	0.74	0.27
Total Particulate Matter (TSP)	0.74	0.27
Sulfur Dioxide (SO ₂)	0.21	0.10
Volatile Organic Compounds (VOC)	2.12	0.81
<i>PM₁₀ is a component of TSP.</i>		
Hazardous Air Pollutants	Potential Emissions	2010 Actual Emissions
Formaldehyde	0.70	0.10
Other HAPs	0.20	0.0016
Total HAPs	0.90	0.1016

Some of the above HAPs may be counted as PM or VOCs.

Title V Program Applicability Basis

This facility has the potential to emit 123.20 tons/yr of CO. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, Columbia Gas Transmission, LLC is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:

45CSR2	Indirect Heat Exchangers
45CSR6	Open burning prohibited.
45CSR11	Standby plans for emergency episodes.
45CSR13	Minor New Source Review permits for stationary sources
45CSR16	Standards of Performance for New Stationary Sources Pursuant to 40 C.F.R. Part 60
WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
45CSR30	Operating permit requirement.
45CSR40	Control of ozone season nitrogen oxides emissions

	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
	40 C.F.R. 60 Subpart GG	Standards of Performance for Stationary Gas Turbines
State Only:	45CSR4	No objectionable odors.
	45CSR17	Particulate Fugitive

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-2065F	October 26, 2006	N/A
CO-R1-C-2007-4A(2005)	March 1, 2007	N/A

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B" which may be downloaded from DAQ's website.

Determinations and Justifications

There have been no changes to equipment at the Flat Top Compressor Station since the previous Title V renewal permit.

This facility was previously registered under General Permit R30-NGGP-2007 for Natural Gas Compressor Facilities. The Division of Air Quality did not renew the general permit for natural gas compressor facilities, therefore this facility's renewal will be issued as a source-specific permit. The source-specific permit includes various requirements which are potentially applicable to natural gas compressor stations. The applicable requirements column in the Section 1.0 Emission Units Table of the permit indicates which of the requirements in Sections 2.0 through 24.0 are applicable to each emissions unit.

Below is a discussion of applicable rules:

1. 45CSR2; *To prevent and control particulate air pollution from combustion of fuel in indirect heat exchangers*- Heating System boiler BLR2 (1.25 mmBtu/hr), Hot Water Boiler BLR3 (2.0 mmBtu/hr), and Line Heater HTR1 (1.00mmBtu/hr) are subject to 45CSR2.

According to 45CSR§2-11.1, Miscellaneous Indirect Heat Exchangers including Reboilers and Regeneration Gas Heaters < 10 MMBtu/hr are exempt from 45CSR§§2- 4, 5, 6, 8 & 9.

2. 45CSR4; *To Prevent and Control the Discharge of Air Pollutants into the Open Air which Causes or Contributes to an Objectionable Odor or Odors*- This facility is subject to 45CSR4 according to sections 3.1.4 and 3.4.3 of the permit.

3. 45CSR17; *To Prevent and Control Particulate Matter Air Pollution from Materials Handling, Preparation, Storage and Other Sources of Fugitive Particulate Matter*- This rule sets a standard for fugitive particulate matter, which is not to be discharged beyond the facility boundary lines which causes statutory air pollution.

Compliance with this standard will be met by the facility submitting a control plan if the Director finds the facility in violation of this rule.

4. 40 C.F.R. Part 63 Subpart ZZZZ; *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)*- Flat Top Station has one Reciprocating Engine (Emission Unit ID- 011G1). This existing engine is an emergency SI, greater than 500 HP, located at an area source. This engine is subject to 40 C.F.R. Part 63 Subpart ZZZZ and requirements from this subpart are specified in section 1.0 of the permit.
5. 40 C.F.R. 60 Subpart GG; *Standards of Performance for Stationary Gas Turbines* - 40 C.F.R. Part 60 Subpart GG applies to a facility that has a stationary gas turbine with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MMBtu) per hour, based on the lower heating value of the fuel fired, which commenced construction, modification, or reconstruction after October 3, 1977.

The Columbia Gas Transmission, LLC, Flat Top Compressor Station has one (1) 6,083 HP turbine engine that is subject to provisions under 40 C.F.R. Part 60 Subpart GG.

40 C.F.R. Part 60 Subpart GG limits nitrogen oxides [40 C.F.R. § 60.332] and sulfur dioxide [40 C.F.R. § 60.333] emissions. There are monitoring requirements [40 C.F.R. § 60.334] to demonstrate compliance with the nitrogen oxides and sulfur dioxide emission limits. Performance testing [40 C.F.R. § 60.335] is required to demonstrate compliance for the nitrogen oxides and sulfur dioxide emission limits.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

1. 45CSR6; *Control of air pollution from combustion of refuse*-This facility does not have any incinerator (or flare) - This facility does not have any incinerator (or flare); hence this rule is not applicable to this facility.
2. 45CSR10; *To prevent and control air pollution from the emission of sulfur oxides*- 45CSR10 does not apply to natural gas fired engines. Also 45CSR10 is not applicable to the facility boilers and heater because they are less than 10 MMBtu/hr.
3. 45CSR21; *To Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds*- This facility is not located in one of the affected counties
4. 45CSR27; *To Prevent and Control the Emissions of Toxic Air Pollutants*- Natural gas is included as a petroleum product and contains less than 5% benzene by weight. 45CSR§27-2.4 exempts equipment “used in the production and distribution of petroleum products providing that such equipment does not produce or contact materials containing more than 5% benzene by weight.”
5. 40 C.F.R. Part 60 Subpart Kb; *Standards of Performance for Volatile Organic Liquid Storage Vessel* - All tanks at Flat Top station are below 75 m³ in capacity.

6. 40 C.F.R. Part 60 Subpart Dc; *Standards of Performance for Steam Generating Units* - The boilers and heater are less than 10 MMBtu/hr; Hence Subpart Dc is not applicable.
7. 40 C.F.R. 60 Subparts K,Ka; *Standards of Performance for Storage Vessels for Petroleum Liquids* - All tanks at Flat Top station are below 40,000 gallons in capacity.
8. 40 C.F.R. 60 Subpart KKK; *Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plant* - Flat Top station is not engaged in the extraction or fractionation of natural gas liquids from field gas, the fractionation of mixed natural gas liquids to natural gas products, or both.
9. 40 C.F.R. 60 Subpart JJJJ; *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines*- Engines at the facility were constructed, reconstructed, or modified prior to June 12, 2006.
10. 40 C.F.R. Part 60 Subpart IIII; *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*- The provisions of this subpart are not applicable to this facility because there are no stationary compression ignition (CI) internal combustion engines (ICE) at this facility.
11. 40 C.F.R. Part 60 Subpart KKKK; *Turbine NSPS*- There is one turbine at Flat Top Station which was installed in 1998. No modifications to the turbine have occurred since the original installation. According to 40 C.F.R §60.4305(a), 40 C.F.R. Part 60 Subpart KKKK is not applicable to the turbine because it was constructed before February 18, 2005.
12. 40 C.F.R. Part 63 Subpart YYYY; *Turbine MACT* -The provisions of this subpart are not applicable to this facility because the facility is not a major source of HAP emissions. According to 40 C.F.R. §63.6085, 40 C.F.R. Part 63 Subpart YYYY applies to turbines at a major source of HAP emissions.
13. 40 C.F.R. Part 63 Subpart HH; *National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities*- This rule is not applicable to this facility because this facility is not an oil and gas production facility.
14. 40 C.F.R. Part 63 Subpart HHH; *National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities*- This facility is not a major source of HAPs; According to 40 C.F.R. §63.1270 (a), Subpart HHH applies to natural gas transmission and storage facilities that are a major source of HAPs.
15. 40 C.F.R. Part 63 Subpart DDDDD; *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters*- The provisions of this subpart are not applicable to this facility because the facility is not a major source of HAP emissions. According to 40 C.F.R. §63.7485, 40 C.F.R. Part 63 Subpart DDDDD applies to boilers at a major source of HAPs.
16. 40 C.F.R. Part 63 Subpart JJJJJ; *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*- This facility operates natural gas fired boilers. According to 40 C.F.R. §63.11195(e), a gas fired boiler is not subject to 40 C.F.R. Part 63 Subpart JJJJJ.
17. 40 CFR 64; *Compliance Assurance Monitoring*- No facility emission sources have any add-on control; therefore, in accordance with 40 C.F.R § 64.2(a), CAM is not applicable to this facility.

There are no Greenhouse Gas Clean Air Act requirements for this facility because the facility has not made any changes that triggered a PSD permit modification.

Request for Variances or Alternatives

None

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: September 11, 2012

Ending Date: October 11, 2012

All written comments should be addressed to the following individual and office:

Beena Modi
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

Beena Modi
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1228 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

- Per Company's request, Section 22.0 has been added for Emission Unit ID- 01109 (in the Section 1.0- Emission Units and Listing of Applicable Requirements Table).
- Per EPA's comment, Section 6.0 has been added for Emission Unit ID- 01109 (in the Section 1.0- Emission Units and Listing of Applicable Requirements Table).